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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/070,218	07/19/2002	Peter Cole Goodwin	BALDS2.021APC	9610
20995	7590	02/16/2006	EXAMINER	
KNOBBE MARTENS OLSON & BEAR LLP 2040 MAIN STREET FOURTEENTH FLOOR IRVINE, CA 92614			MARCANTONI, PAUL D	
			ART UNIT	PAPER NUMBER
			1755	
DATE MAILED: 02/16/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/070,218	<b>Applicant(s)</b> GOODWIN ET AL.	
	<b>Examiner</b> Paul Marcantoni	<b>Art Unit</b> 1755	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 12 December 2005.  
 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 12,14-20 and 22 is/are pending in the application.  
 4a) Of the above claim(s) 20 is/are withdrawn from consideration.  
 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
 6) ☒ Claim(s) 12,14-19 and 22 is/are rejected.  
 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
 8) ☒ Claim(s) 12,14-20 and 22 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☒ All b) ☐ Some \* c) ☐ None of:  
 1. ☒ Certified copies of the priority documents have been received.  
 2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

Applicant's arguments filed 12/12/05 have been fully considered but they are not persuasive. Please note that if any rejections under any statute are no longer present they have been resolved as a result of applicants' amendments and/or response. Also, any prior art no longer applied can be construed also as withdrawn.

Provisional Obviousness Type Double Patenting:

Claims 12, 14-19, and 22 are provisionally rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 1-11 of US Patent Publication 2005/0045067 A1 (10/960,150 Naji et al.). Although the conflicting claims are not identical, they are not patentably distinct from each other because Naji et al. teach a composition comprising cement, plastizer such as melamine sulfonate formaldehyde (page 2 [0033]), cellulose (p.3) and gums [0039] in amounts overlapping the instantly claimed invention.

Applicants have responded to the rejection by stating they wish to hold it in abeyance. As a result, this rejection stands.

35 USC 112 Second Paragraph:

Claims 12, 14-19, and 22 rejected under 35 U.S.C. 112, second paragraph, as failing to set forth the subject matter which applicant(s) regard as their invention.

The term "density modifier" remains indefinite because other weighted components such as silica and lime can potentially affect or modify density (potentially increase it) but modify can be either a density increase or decrease and this is not specified by this term. Note that the applicants stated this term was definite yet *had not*

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provided density ---reducers--- such as fly ash, perlite, vermiculite, hollow spheres, etc. The applicants argue density reducers but not all density modifiers. Thus other components of claim 12 such as lime and silica can still modify density though not likely to reduce it like fly ash, perlite, vermiculite, hollow spheres, etc. This is not a suggestion but simply pointing out that lime or silica can still modify versus the components of applicants' original disclosure which reduce overall density of the cement product.

While claim 20 is non-elected, the term ~~type~~<sup>based</sup> is indefinite. This issue can be easily resolved by either deletion of the term "based" so it reads acrylic polymers or else substituting in the word containing for based so it reads acrylic containing polymers.

#### 35 USC 103:

Claims 12, 14-19, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fukuba et al. '697, Shin et al. (KR 9508587 abstract), Schermann et al. '383, or Dingsoyr '060.

*Note : Again, all references from first action on merits no longer present have been withdrawn.*

#### Response

The applicants argue that Fukuba '697 does not suggest an extrudable formulation. The examiner disagrees. Fukuba '697 teaches the same composition containing the same components in overlapping amounts as claimed by applicants for their invention. As a result, any properties such as extrudability would also have to be

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present in Fukuba '697. The applicants also argue viscosity yet they argue a feature not claimed and it is improper to argue a feature (viscosity) not present in their claims such as claim 12. Applicants are also referred to Example 6 in column 7 which teaches a sulfonic dispersing agent in amounts of about 0.2 wt% and methyl cellulose in amounts of 0.05 wt% which overlaps their claimed ranges of amounts of components.

Contrary to applicants' arguments, Shin does teach the same components that fall into applicants' claimed range of amounts. Shin et al. teach for example, 100 parts cement, 25 parts slag, 2.5 parts cellulose thickener, 0.6 parts melamine sulfonic acid, and 0.04 parts antifoaming agent giving a total parts by weight of 128.14. Thus, the weight percent of cellulose thickener is  $2.5/128 \times 100$  which equals 1.9 wt% and the weight percent of melamine sulfonic acid is  $0.6/128.14 \times 100$  which equals 0.47 or about 0.5 which still is within applicants' claimed ranges.

Also, the applicants argue that Shin's cement composition is not extrudable. The examiner disagrees because Shin also teaches the same composition of same components in overlapping amounts and properties resulting should thus also be the same. Those properties are inclusive of being extrudable. The applicants also do not claim an intended use. Still, nevertheless, the new use of a known composition is not a patentable distinction.

The applicants argue that Schermann et al. 383 is different than their claimed extrudable cement formulation. Again, Schermann et al. '383 teaches the same components in overlapping amounts and properties such as extrudability would have thus been expected to also be present in this prior art material. See column 5 lines 63-

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64 wherein the II component is naphthalene sulfonic acid condensate, the thickener is cellulose (col.6, lines 18-20) and the amount of sulfonated dispersant (II) in the cellulose thickener can be from 0.01 to 99 wt% (col.6, lines 23-25). Schermann also teaches that the total thickener-sulfonate dispersion combination should be in amounts of 0.01 to 5 wt% based on the dry mass of the building product which can be plaster or cement (both cements and both hydraulic-see col.6, lines 40-51).

Dingsoyr also teaches cement, a thinner which is a lignosulfonate or other sulfonated dispersants (see claim 14 in col.8) in amounts of 0 to 12 wt% (dry weight) as shown in claim 1 in column 7. Also, Dingsoyr teaches 0 to 8 wt% (dry weight) of a fluid loss additive such as cellulose derivatives (see col.8, claim 6). Thus, Dingsoyr teaches the same composition in overlapping amounts as claimed by applicants and one of ordinary skill in the art thus would have expected properties to be the same including extrudability.

Citation of Relevant Art:

Hayakawa et al. (US Patent No. 5,047,086) has been cited of interest as relevant art but does not appear to teach a sulfonated dispersion agent. This was cited in applicants' specification

Shah et al. (US Patent No. 5,891,374 teaches adding a sulfonate dispersant and cellulose to make an extrudable cement composition. It is not clear if the amounts overlap applicants' presently claimed invention. This was cited in applicants' specification.

Burge et al. (US Patent No. 5,453,123) could have also been used in a rejection under 35 USC 103 above because they teach 0.2 to 5 wt% based on cement of superplasticizer such as a sulfonated dispersant (col.5, lines 27-31 and col.4, lines 1-15). Burge et al. also teach the addition of 0.01 to 10 wt% based on cement of a thixotropic agent such as cellulose as set forth in column 5, lines 39-47 and claim 10 in column 10.

Sobolev et al. (US 6,664,289 B2) also appears to teach a cement composition comprising sulfonated dispersant and cellulose in overlapping amounts.

WO 8600291 (Sandoz) was cited by applicants and it still teaches applicants' claimed invention especially meeting the limitations of claim 12. Note that the amount of 0.2 lignosulfonate meets the requirement of applicants' claimed amounts for sulfonate dispersant and 0.07 wt% cellulose + 0.6 wt% sodium gluconate meet the limitation for viscosity enhancing agent. Notice that applicants do not claim any specific viscosity enhancing agent such as cellulose so it can also read upon the sodium gluconate as a viscosity enhancer.

Fujio et al. (Kao Corporation-JP 06-127992) was prior art cited by applicants and could also have been used in a rejection under 35 USC 103 of applicants' claims as it teaches cement composition for extrusion with an amount of cellulose of 1.0 to 10 wt% and 0.6 to 3.0 wt% sulfonated dispersant. It only differs by 0.1 wt% which would not appear significant since the greater amount still allows for extrudability.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.



**PAUL MARCANTONI  
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